A.	Cover She	eet (Attach to front of proposal	.)			
1.	Specify:	agricultural project or ⊠ urban project	×	individual applicat joint application	ion or	
2.	Proposal ti	itle concise but descriptive:	Regiona	I High-Efficiency W	/ashing M	achine Rebate Program
3.	Principal a	pplicant organization or affil	iation: <u>E</u>	lectric and Gas Inc	dustries As	ssociation (EGIA)
4.	Contact	name, title: <u>Tim Michel, Execu</u>	<u>ıtive Dire</u>	ector		
5.	Mailing ad	dress: <u>P.O. Box 1938, San Le</u>	andro, C	California, 94577		
6.	Telephone	e: <u>(510) 357-6231</u>				
7.	Fax: <u>(510)</u>	357-5703				
8.	E-mail: tim	nichael@egia.com				
9.	Funds requ	uested dollar amount: <u>\$1,75</u>	0,875			
10.	Applicant of	cost share funds pledged do	llar amo	unt: <u>\$2,654,730</u>		
11.	Duration (r	month/year to month/year):	Ju	ly 1, 2001	to	June 30, 2003
cor	ducted: Sta	embly and Senate districts and ate Assembly: 6 <sup>th</sup> , 11 <sup>th</sup> , 14 <sup>th</sup> ,	15 <sup>th,</sup> 16 <sup>tl</sup>	<sup>h</sup> . 18 <sup>th</sup> . 20 <sup>th</sup> throug	h 24 <sup>th</sup> . 27 <sup>tl</sup>	h, and 28 <sup>th</sup> Districts
<u>Ser</u>	nate District	ts: 3 <sup>rd</sup> , 7 <sup>th</sup> , 9 <sup>th</sup> , 10 <sup>th</sup> , 11 <sup>th</sup> , 13 <sup>th</sup> Districts: 6 <sup>th</sup> , 7 <sup>th</sup> , 9 <sup>th</sup> , 10 <sup>th</sup> , 13	<sup>1</sup> , and 15	oth Districts	Districts	
<u>C01</u>	<u>igressionai</u>	Districts: 6 , 7 , 9 , 10 , 13	, 14 ,	15 , 16 , and 17	DISTRICTS	
<u>Dav</u> Sar	<u>/is, East Ba</u> nta Clara Va	and geographic boundaries of the Municipal Utility District, Ala alley Water District, Marin Mundescription in Appendix I)	meda Co	ounty Water Distric	t, Contra (	Costa Water District,
follo	owing: the truthfuln the individua	signature of official representing the sess of all representations in the all signing the form is authorized the will comply with contract terms.	e propos	al; mit the application o	on behalf o	of the applicant;
	(p	printed name of applicant)			(date	3)
		(signature of applicant)		-		

#### **SECTION B**

## **SCOPE OF WORK**

This section consists of the scope of work. The relevance and importance of the project are described and its merit, feasibility, monitoring, and assessment are addressed.

## **B.1** Relevance and Importance

This section presents a summary of the project, a statement of water issues, and the scope and objectives of the project.

**B.1.1 Abstract.** The project consists of providing a financial incentive program for the installation of high water and energy efficient washing machines in the City of Davis, East Bay Municipal Utility District, Santa Clara Valley Water District, Marin Municipal Water District, Contra Costa Water District, Alameda County Water District, and the Zone 7 Water Agency customer service areas. Incentives are based on the guidelines of the California Urban Water Conservation Council (CUWCC) Memorandum of Understanding (MOU) regarding urban water conservation in California. Four of the seven agencies - City of Davis, ACWD, MMWD, and Zone 7 - have been implementing a regional high-efficiency washing machine rebate program in conjunction with PG&E during 1996-2000. During that time, EGIA was administering the program. PG&E ceased funding at the close of the 2000 program, and the grant funding being applied for will allow the agencies to continue their programs at the same level of service to their customers. The objective of this project is to provide the same rate of high-efficiency washing machine rebates for a duration of two years above and beyond what is required in CUWCC's BMP 6, and continue the market transformation to more efficient appliances throughout California.

To date, four of the seven participating agencies have executed service contracts with EGIA to continue the program at the lower rate. Three agencies, CCWD, EBMUD, and SCVWD, will be conducting a service provider procurement process, which will include EGIA. The selection process will be conducted during the March-May period with the service provider being selected in time to be available for the proposed program with CALFED. The CALFED funding will enable all agencies (Agencies) to continue at the higher rate. Table B-1 summarizes the status of the rebate processing service for participating agencies.

Table B-1. Agency Service Contract Status with EGIA

Agency	EGIA contract through:	Service contract status
Davis	December 31, 2001	Extend through project period
ACWD	December 31, 2001	Extend through project period
MARIN	December 31, 2001	Extend through project period
ZONE 7	December 31, 2001	Extend through project period
EBMUD	June 30, 2001	March through May Selection Process
		Available July 1, 2001
SCVWD	NA	March through May Selection Process
		Available July 1, 2001
CCWD	NA	March through May Selection Process
		Available July 1, 2001

Those Agencies still formulating their service contract process may or may not execute a contract with EGIA for their rebate program. In the event they do not contract with EGIA, the CALFED funds for those agencies will be distributed through the new vendor selected by EBMUD, SCVWD, and CCWD. The relative costs are projected to remain the same.

**B.1.2 Water Issues, Need, and Consistency with other Plans.** The efficient use of California's limited water supplies is a critical local, regional, and state-wide water issue. The purpose of this project is to significantly increase water use efficiency by offering financial incentives to purchase energy and water efficient clothes washing machines. The high-efficiency machines use 60% less energy per load and 40% less water per load than conventional machines.

This project has the potential to positively impact the Bay-Delta systems by reducing the overall reliance on Bay-Delta water exports. The Agencies' conservation efforts are important as part of a long-term, comprehensive effort to reduce pressure on the Bay-Delta system to meet regional and state-wide water needs. One of the fundamental objectives of the CALFED Bay-Delta program is to reduce the mismatch between Bay-Delta water supplies and current and projected beneficial uses dependent on the Bay-Delta system. Water use efficiency projects are one of the cornerstone strategies the CALFED Bay-Delta program is deploying to achieve this objective. Larger incentives for the purchase of high-efficiency washing machines will reduce demand for a significant urban end use of Bay-Delta water supplies. It is anticipated that the 23,345 rebates issued under this project will result in water savings of approximately 366 acre-feet per year and a total of 4,384 ac-ft by 2013.

By reducing the amount of water use by customers in the Agencies' water supply areas, other beneficial water uses will be realized such as providing flow to improve aquatic ecosystems and the habitat restoration of many Federally listed species: Saltwater Harvest Mouse, California Clapper Rail, Delta Smelt, Splittail, Steelhead, Chinook salmon, fresh water shrimp, Coho salmon, and Steelhead along the Mokelumne River, Lagunitas Creek, Walker Creek, and Alameda Creek watersheds. Increasing the amount of water available will enhance groundwater recharge efforts, thus effectively reducing saltwater infiltration into the groundwater basin.

This project involves the implementation of urban water conservation best management practice (BMP) number 6 *High-Efficiency Washing Machine Rebate Programs*, as defined by the California Urban Water Conservation Council (CUWCC). The unpredictable water supply and ever increasing demand on California's complex water resources have resulted in a coordinated effort by the California Department of Water Resources (DWR), water utilities, environmental organizations, and other interested groups to develop a list of urban BMPs for conserving water. This consensus-building effort resulted in the Memorandum of Understanding Regarding Urban Water Conservation in California (MOU), which formalizes an agreement to implement these BMPs and makes a cooperative effort to reduce the consumption of California's water resources.

The current high-efficiency washing machine rebate program was initiated in 1996 with participation by the City of Davis, EBMUD, ACWD, SCVWD, and MMWD, with EGIA administering the program. This rebate program has grown to be extremely popular throughout the Bay Area. In the Agencies service area, over 34,800 rebates have been issued since the program began in 1996. At an estimated annual savings of 5,100 gallons per washing machine, the retrofitted machines represent a yearly water savings of more than 544 acre-feet. This is a very cost-effective

program relative to savings in production and operating costs as shown in Section E of this application.

This project is compatible with local water management plans and the Agencies' ongoing efforts to achieve greater water use efficiency through recommendations for reducing long-term residential water demands. Participation in the rebate program is consistent with many water conservation plans such as MMWD's 1994 Water Efficiency and Conservation Master Plan, ACWD's Integrated Resources Planning Study, and CCWD'S Urban Water Management Plan, its Future Water Supply Implementation Plan, SCVWD's Integrated Water Resource Plan, EBMUD's 1994 Water Conservation Master Plan, and the City of Davis' 1995 Urban Water Management Plan.

**B.1.3 Project Nature, Scope, and Objectives.** This project is a regional approach to provide a financial incentive towards the purchase and installation of high-efficiency washing machines. The costs of the project primarily involve the agency match share and EGIA's administrative costs to implement the two-year program. Approximately 23,345 rebates will be issued over the two-year program.

The scope of the project consists of two tasks:

- 1. Continue the current successful rebate program.
- 2. Measure results/issue report.

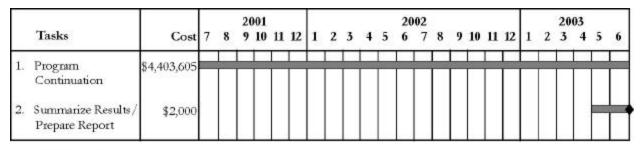
The objectives of the project are to:

- realize greater water use efficiency by increasing market share and affordability of highefficiency washing machines,
- increase the regional exposure individual agency rebate offers,
- promote public acceptance of high-efficiency clothes washing machines.

## B.2 Technical/Scientific Merit, Feasibility, Monitoring, and Assessment

This section describes the merit, feasibility, and the monitoring and assessment of the project.

- **B.2.1 Methods, Procedures, and Facilities.** At least four of the seven Agencies will continue to utilize EGIA as administrator of the rebate program. EGIA has implemented this project for the participating Agencies since 1996 with great success. The value of their continued participation is threefold:
  - 1. The request to CALFED is consolidated into one single request instead of a request from each of the seven agencies.
  - 2. All funds will flow through EGIA, streamlining invoicing to CALFED.
  - 3. EGIA provides the essential link between the water customers, the energy customers, and the appliance retailers.
- **B.2.2 Schedule.** A bar chart schedule is presented in Figure B-1. Table B-2 presents a quarterly expenditure projection.



Deliverable items

Figure B-1. Project Timeline

Table B-2. Quarterly Expenditure Projection

Quarter	Months	Expenditure
Year 1		•
1	July-September	\$550,701
2	October-December	\$550,701
3	January-March	\$550,701
4	April-June	\$550,701
Year 2	•	
1	July-September	\$550,701
2	October-December	\$550,701
3	January-March	\$550,701
4	April-June	\$550,701
Total		\$4,405,605

**B.2.3 Monitoring and Assessment.** EGIA will maintain a database by participating water agency indicating the rebate amounts paid, rebate reimbursements received, and balance due year-to-date. Once a week, EGIA will also provide agencies with an Excel© spreadsheet listing the name, address, and water district/utility account number (if supplied) of rebate applicants for purposes of account verification by the district/utility. Quarterly reports will be issued by Agency to CALFED for the two-year duration.

#### **SECTION C**

## **OUTREACH, COMMUNITY INVOLVEMENT, AND INFORMATION TRANSFER**

This section describes outreach efforts that will be made by the Agencies and EGIA during the washing machine rebate program; training, employment, and capacity building potential the program provides; and the plan for disseminating information regarding the results of the program.

## **C.1** Outreach Efforts

An effective public outreach effort is essential to the project's success. Contact will be made through various means with thousands of customers, including disadvantaged community members, to promote and reinforce water use efficiency by providing a financial incentive to purchase a high-efficiency clothes washing machine. The partnership developed between the various water agencies ensures that a large and economically diverse customer base will be reached. Those agencies contracting with Electric and Gas Industries Association (EGIA), a non-profit trade association, will partner with EGIA to handle customer verification, application processing, and to issue rebate checks to customers.

## **C.2** Training, Employment, and Capacity Building Potential

Appliance dealers participating in the rebate program will be educated in energy and water conservation issues so they may answer questions and make recommendations to customers.

## **C.3** Information Dissemination Plan

The Agencies' high-efficiency washing machine rebate program has been an ongoing program and has proven to be a success. Therefore, the Agencies will continue with their current information dissemination plans and between all Agency efforts may or may not encompass the following outreach efforts:

Educational materials – Fact sheets about the high-efficiency washing machine rebate program – written in easy to understand language – will be critical to successful public education campaign. District activities, programs and accomplishments will be highlighted in regular customer newsletters. Customers will receive direct information through agency bill inserts, door hangers, and information kits.

Media relations – This may include public service announcements and editorial commentary, both in print and on electronic media, in order to effectively reach a large, diverse agency customer base. The rebate program will be highlighted as well as the Agencies' other conservation accomplishments and services.

*Web site* – The Agencies' respective web sites will keep the community updated on the rebate program. A customer will be able to find information on where to purchase qualifying washing machines, how to apply for the rebate, energy and water savings statistics, and contact phone numbers to answer customer questions.

Community event participation – Participation in community events such as fairs and festivals are highly visible opportunities to reach local residents. A simple exhibit with display boards, water-related props, promotional items, information pamphlets, and an interactive component will be an attractive educational tool for the Agencies.

Customer Information by Telephone – The public will have access to established water agencies and EGIA direct phone lines to insure availability of public information. Therefore Agencies will publicize and encourage customers to use phone communication to provide immediate response to customer questions. An Agency staff member knowledgeable about the rebate program will be available to answer customer concerns.

*Point of sale* – Participating appliance dealers will have rebate applications and information pamphlets available on site with the qualifying washing machines clearly marked. Point of sale publicity will inform customers of program availability when purchasing a product outside of their service area. Consumers may choose to participate in the program by purchasing a qualifying machine and completing the necessary rebate form in one convenient step.

*Program evaluation* – It is important to evaluate the public relations efforts throughout the project. This will ensure the information dissemination program plan is on track and meeting the plan goals and objectives. An informal focus group session will be held at the end of the first six months to determine which tactics have been effective and which areas may need to be revised to be more effective. At the end of the project, customers will be contacted to determine their level of satisfaction. The concerns of any unsatisfied customers will be addressed and resolved as quickly as possible by the Agencies.

### **C.4** Letters of Notification

Appendix II contains copies of agreements between EGIA and participating water agencies representing notification of this project. EGIA and the participating water agencies have worked together for several years and have maintained communication in regards to regional high-efficiency washing machine rebate program efforts. In consideration of the tenure of this partnership, no further notifications are included for the purpose of this application.

#### **SECTION D**

## QUALIFICATIONS OF THE APPLICANTS, COOPERATORS, AND ESTABLISHMENT OF PARTNERSHIPS

The qualifications of the project manager, cooperators, and partners to be involved in the High Efficiency Washing Machine Rebate program are discussed in this section. A description of the EGIA is also included.

## D.1 The EGIA and Project Manager

EGIA is a non-profit trade association based in San Leandro, California, which promotes the progress of the Electric and Gas industries. EGIA has over 65 years of experience working with government, public utilities, contractors and major appliance retailers promoting conservation.

EGIA designs and administers consumer rebate programs of energy efficient products such as air conditioners, clothes washers, and refrigerators. EGIA administers training in the latest energy efficiency measures for HVAC, windows, and insulation contractors. EGIA also advises government agencies on contractor and retailer concerns, public perception, and response to past and proposed measures.

The project management responsibilities will be shared between EGIA and the participating water agencies. Table D-1 represents the project management team.

Agency	Contact	email	Phone	Fax	Position
City of	Jacques DeBra	Water@dcn.davis.ca.us	(530) 757-5679	(530) 758-4738	Senior Utility Resource
Davis					Specialis
EGIA	Tim Michael	<u>Timichael@egia.com</u>	(510) 357-6231		Executive Director
EBMUD	Mike Hazinski	Mhazinsk@ebmud.com	(510) 287-1802	(510) 287-1883	Water Conservation
					Supervisor
ACWD	Vana Phibbs	Vana.phibbs@acwd.com	(510) 659-1970 x218	(510) 770-1793	Water Conservation
		_			Associate
CCWD	Ray Cardwell	Rcardwell@ccwater.com	(925) 688-8234	(925) 688-8122	Water Conservation
					Specialist
SCVWD	William Granger	Willgran@scvwd.dst.ca.us	(408) 265-2607 x2090	(408) 978-0156	Water Conservation
					Specialist II
MMWD	Denis Poggio	Dpoggio@marinwater.org	(415) 945-1522	(415) 927-4953	Water Conservation
					Coordinator
Zone 7	Andy Florendo	Aflorendo@zone7water.com	(925) 484-2600	(925) 462-4953	Water Conservation
	-				Coordinator

Table D-1. Project Management Team

Resumes are included in Appendix III. Partnerships formed for the high-efficiency washing machine program are discussed in Section D.3. The high-efficiency washing machine rebate program was initiated to encourage consumer purchase of energy-efficient and water-saving products and support the effort to encourage water conservation in Northern California.

## **D.2** External Cooperators

External cooperators such as applicance retailers, product manufacturers, water customers, and energy utilities will be utilized for the High Efficiency Washing Machine Rebate program.

## **D.3** Partnerships Developed to Implement Project

Partnerships will continue that were developed for the 2000 High-Efficiency Washing Machine Rebate Program, with the exception of Pacific Gas and Electric and the addition of Contra Costa Water Agency. Alameda County Water District, the City of Davis, East Bay Municipal Utility District, Marin Municipal Water District, and the Zone 7 Water Agency had partnered with PG&E to offer rebates toward the consumer purchase of energy and water efficient clothes washing machines. Electric Gas Industries Association (EGIA) is the non-profit organization that will continue to coordinate the high-efficiency washing machine rebate program for at least four of the seven program participants. The following partners and the total rebates awarded within their respective service areas are included in Table D-2.

Table D-2. Project Partners and Number of Awarded Rebates, Year 2000

Participant	Number of Awarded Rebates
City of Davis	485
Alameda County Water District	667
East Bay Municipal Utility District	3,762
Marin Municipal Water District	625
Santa Clara Valley Water District	4,500
Contra Costa Water District	998
Zone 7	684
Total	11,721

High-efficiency washing machine rebate participation levels are projected to continue from the year 2000 baseline through the two-year project period.

#### **SECTION E**

#### **COSTS AND BENEFITS**

This section describes both the quantifiable and non-quantifiable costs and benefits associated with the project. Included is a detailed budget summary and breakdown and justification. An assessment of costs and benefits is also provided.

## **E.1** Budget Summary and Breakdown

Table 1 in Appendix IV presents a detailed estimated budget that includes salaries and wages, fringe benefits, supplies, equipment, services and consultants, travel and other direct costs. The table breaks down the estimated costs between the Agencies' provided services and the services of the consultant (EGIA or otherwise described in previous sections) that will be conducting the project.

The total cost of the project is \$4,405,605. The Agencies are requesting \$1,750,875 from CALFED funding grants. The remaining \$2,654,730 will be provided by the local agency water budgets and/or water funds. The pro-rata cost share between CALFED and the participating agencies is 40/60, respectively, for the proposed project.

## **E.2** Budget Justification

The project budget is based on the well-documented experience of the 1996 through 2000 regional program. Furthermore, the regional approach results in lower project overhead costs that makes this project more cost effective than individual efforts. The budget reflects the need for higher rebate amounts offered by CALFED to close the price gap between conventional products and their high-efficiency counterparts.

The budget estimate was prepared by Brown and Caldwell, a professional water engineering firm with extensive experience in managing and conducting water conservation projects like this highericiency washing machine rebate program. Brown and Caldwell is an approved consultant included in the California Urban Water Conservation Council's list of qualified consultants for the Year 2001.

## E.3 Benefit Summary and Breakdown

- 1. This section lists the expected project outcomes and benefits of the proposed project.
- **a) Quantifiable Project Outcomes and Benefits.** It is anticipated that the 23,345 rebates issued under this project will result in the following:
  - total life water savings of approximately 4,385 acre-feet,
  - a total agency benefit of \$1,011,790,
  - a wastewater benefit of \$2,026,619,
  - a total customer benefit of \$22,567,738 (includes rebate, water, and energy savings).

The 23,345 rebates will also save 182,354,865 kWh in electricity. These quantified outcomes and benefits will benefit the Agencies and CALFED by achieving a greater water use efficiency and

reducing the overall reliance on Bay-Delta water. These same outcomes and benefits will be realized by the customers by reducing the amount of energy and water used, thus in turn, reduce their water and energy bills.

- **b)** Non-quantifiable Project Outcomes and Benefits. There are many project benefits that can not be effectively quantified at this point in time. These are:
  - 1) Improved Bay Delta ecosystem through the reduction in water diversions by the Agencies from the Bay Delta. Increased water use efficiency will have a direct benefit to more "environmental water" for the delta.
  - 2) Improved local watershed ecosystem by decreased diversions from local creeks and reservoirs thereby benefiting in-stream uses.
  - 3) Sustained economic health of the critical Silicon Valley business community. Water supply reliability is a cornerstone of continued growth and vitality of this strong economic engine of the State of California. Increased water conservation is one of the four primary components of the Agencies' water management plans.
  - 4) Customer attitudes towards water conservation are revealed, enabling the Agencies to more effectively reach customers on this subject.
  - 5) Relief for agency area infrastructure. Can avoid upsizing infrastructure to meet future peak demands through demand management. Water use efficiency decreases wastewater production.

## E.4 Assessment of Costs and Benefits

This section includes an assessment that summarizes the costs and benefits of the proposed project. The major analysis assumptions are listed and explained. This section also shows the present value of the quantified costs and benefits for the applicant and CALFED and summarizes non-quantified costs and benefits to the applicant and CALFED.

All quantified benefits and costs are expressed in year 2000 dollars using a six percent discount rate. A list of all major assumptions for the analysis of the quantifiable cost and benefits is as follows:

- 1. 11,660 rebates projected to be issued in FY2002 and 11,685 rebates projected to be issued in FY2003.
- 2. This project will reduce average water usage by 5,100 gallons per machine per year. This assumption is based on the *Memorandum of Understanding Regarding Urban Water Conservation in California*, as amended September 21, 2000. Page 33.
- 3. Agency administrative and overhead costs will cost \$25/rebate with the exception of Zone 7 (\$30) and EBMUD (\$27.30). This assumption is based on estimations provided by each agency.
- 4. The weighted average value of conserved water for all agencies is \$536/ac-ft.
- 5. The average value of wastewater savings for all agencies is \$681/ac-ft.
- 6. Energy savings to customer per washer is 651 kWh/yr.
- 7. Customer avoided average power costs per washer is \$78.13/yr.
- 8. Customer avoided average water costs per washer is \$22.23/yr.

A summary of the quantified costs and benefits to the Agencies, CALFED, and customers are compiled in Table E-1. A summary of the non-quantified costs and benefits to the Agencies and CALFED are compiled in Table E-2.

Table E-1. Summary of Qualified Costs and Benefits

	Costs		Benefits	
	dollars	Water, dollars	Water, ac-ft	Energy, kWh
All Agencies	2,433,515	1,011,790	4,385	None
Wastewater Entities	None	2,026,619	4,385	None
CALFED	1,604,971	None	4,385	None
Customer	None	22,567,738	4,385	182,354,865

Table E-2. Summary of the Non-quantified Costs and Benefits

Agency	Non-quantified costs		Non-quantified benefits
All Agencies	None	•	More efficient water use.
CALFED	None	•	More efficient water use.
		•	More water for Bay-Delta.

## APPENDIX I SERVICE AREA MAP AND DESCRIPTION

# Appendix I. Table 1. Service Area Description

Agency	POPULATION SERVED	Major Areas Served
Santa Clara Valley Water District	1.7 million	15 cities (including San Jose/Santa Clara)
East Bay MUD	1.2 million	Many entities (including Richmond,
		Berkeley, Oakland, Alameda, Orinda,
		Lafeyette
Contra Costa Water District	220,000 with treated	Concord, Walnut Creek, Pleasant Hill,
	water	Pacheco
	210,000 with untreated	Antioch, Pittsburgh, Martinez
Alameda County Water District	318,000	Fremont, Newark, Union City
Zone 7	180,000	Livermore, Dublin, Pleasanton
Marin Municipal Water District	170,000	Marin County (including San Rafael,
_		Tiberon, Sausalito)
City of Davis	60,000	City of Davis, El Macero
TOTAL	4,058,000	

## APPENDIX II AGREEMENT LETTERS

## APPENDIX III RESUMES

## Electric & Gas Industries Association

P.O. BOX 1938 \* SAN LEANDRO, CALIFORNIA 94577 \* PHONE 510-357-6231 \* FAX 510-357-5703

The Electric & Gas Industries Association (EGIA) is a California, non-profit trade association formed in 1966 by a merger between the Northern California Electrical Bureau and the Gas Appliance Society of California. These two forerunner organizations, formed in 1932, give EGIA roots dating back 69 years in the service of energy conservation programs.

## The Governing Body

Currently a 28 member Board of Directors governs EGIA. These Directors include a mix of appliance manufacturers, distributors, and retailers, from large national chains to independent retailers, as well as contractors. Among Directors currently sitting on the Board include representatives from Maytag Company, Amana Appliances, Sears Roebuck & Company, Western Appliance, E.B. Ward Company- a Carrier air conditioning distributor.

### **Client List**

EGIA's current clients include all of California's four major utility companies, Pacific Gas and Electric Company, Southern California Edison, Southern California Gas Company, and San Diego Gas & Electric Company. In addition we serve many smaller municipalities, water utilities, and other groups, such as: City of Palo Alto, Silicon Valley Power, Alameda County Water District, City of Davis Public Works, East Bay Municipal Utility District, Marin Municipal Water District, Sonoma County Water Agency, Town of Windsor, Zone 7 Water Agency, and Associated Volume Buyers (AVB).

## **Consulting Services**

A major strength of EGIA is its ability to provide a full range of customer-focused services including industry consulting, designing of programs, designing of program forms, implementation and administration of consumer focused programs.

## **Abbreviated Program Resume**

## California Residential Lighting and Appliance Program (CRLAP) 1999-2001

This program promotes the market transformation of the appliance industry in that it increases the manufacturing, flooring, and sales of energy efficient appliances for California's investor owned utilities' 15 - 16 million residential customers. The program has four major components:

- 1. **The Field Service Program:** Coordinates field service personnel for the distribution of point-of-purchase materials and in-store training relating the benefits associated with ENERGY STAR® qualifying appliances. EGIA is currently managing a network of appliance retailers totaling 400-plus stores representing 700-plus storefronts throughout California.
- 2. **Consumer and Retailer Programs:** This component of the program features incentives of various sizes that go directly to either the consumer (rebates) or to the retailer or their salespeople (incentives/spiffs). Programs falling into this category are:
  - 1999 ENERGY STAR® Appliance Incentive Program
  - ENERGY STAR® Qualified Clothes Washer Rebate Program 2000
  - ENERGY STAR® Room A/C Dealer/Salesperson Incentive Program 2000

- 2000 Refrigerator Rebate Program featuring models exceeding the 2001 Federal Appliance Standard
- ENERGY STAR® Qualified Clothes Washer Incentive Program 2000
- 3. **Co-op Advertising Program/CRLAP Sponsored Advertising:** This component provides advertising dollars to appliance dealers promoting ENERGY STAR® qualifying products in advertisements.
- 4. **Market Outreach:** A team within the CRLAP has been assembled to call on national retailers and appliance manufacturers.

## Pacific Gas & Electric Company

- Efficient Refrigerator Rebate Program, 1989-1999
- Efficient Multiple-Dwelling Refrigerator Rebate Program, 1993-1994
- Efficient Refrigerator Dealer/Salesperson Incentive Program, 1992-1996
- ENERGY STAR® Program, 1997-Present
- Home Energy Savings Loan Program, 1994-1997

### Southern California Edison

- Dealer/Salesperson ENERGY STAR® Incentive Program, 1999
- Appliance Dealer ENERGY STAR® Co-op Advertising Program, 1999

## City of Palo Alto

- Efficient Clothes Washer Rebate Program, 1999 2000
- Efficient Dishwasher Rebate Program, 1999 2000
- Efficient Refrigerator Rebate Program, 1999 2000

## Silicon Valley Power - City of Santa Clara's Electric Utility

- Efficient Refrigerator Rebate Program, 1998-Present
- Compact Fluorescent Light Program, 1998-Present

## **Alameda Bureau of Electricity**

Efficient Refrigerator Rebate and Recycling Program, 1998

## The Association and AVB

- Associated Volume Buyers (AVB) Appliance Delivery Rebate Program, 1998-Present
- EGIA/First Financial Funding Group Loan Program, 1998-1999
- EGIA Dishwasher/Microwave Oven Sweepstakes, 1989

## Vana Phibbs Alameda County Water District (ACWD)

Vana Phibbs has served as the Water Conservation Associate for the Alameda County Water District for the past 2.5 years. She has managed the Washer Rebate program for the District since employed. With a history in Public Relations and Marketing, Vana was hired by ACWD to enhance the agency's conservation outreach efforts. Vana also has an extensive background in Public and Legislative Affairs as well as Organization Management and Planning.

## Jacques DeBra City of Davis

## Senior Utility Resource Specialist Contact Information: 530-757-5679; 530-758-4738 (fax) Address: City of Davis PW, 23 Russell Blvd., Davis CA 95616

Mr. DeBra has been working with the City of Davis for the past 11 years. He is responsible for managing the city's water conservation program, as well as many other utility functions in water, wastewater, and stormwater. He has worked in the water industry for 15 years and has been involved with many inter-agency partnerships during that time. In addition Mr. DeBra has worked collaboratively with the California Department of Water Resources and other such agencies including the areas of funding, pilot programs, and involvement in the development of new efforts. The City of Davis is a signatory to the urban CUWCC MOU. Mr. DeBra is an active member of the American Water Works Association.

## Raymond T. Cardwell Contra Costa Water District

#### **SUMMARY:**

- Bachelor of Science Degree in Environmental & Systematic Biology
- 10 years experience in professional management of environmental resources.
- Certified Landscape Auditor (Irrigation Association), Water Conservation Practitioner Level 1 (CA-NV American Water Works Association)

#### **EDUCATION:**

## Bachelor of Science in Environmental & Systematic Biology, 1982

California State Polytechnic University, San Luis Obispo, California

Major Courses of Study:

Biology Special Studies in Natural Resources

Chemistry Environmental Education

Botany Solid and Hazardous Waste Management

Natural Resource Management Soil and Water Resources

## **EXPERIENCE:**

## Contra Costa Water District, July 1995 to Present Water Conservation Specialist, Concord, California

- Responsible for implementing and managing a variety of water conservation
  programs to the public, including establishment of standards for measurement
  and assessment for low flow toilet, high-energy-efficient washers, and
  commercial, industrial and institutional rebate programs. Developed and
  promoted conservation workshops, and commercial water surveys evaluating
  water conservation measures to implement, including cooling tower upgrades
  and commercial toilet retrofits.
- California Urban Water Conservation Council sub-committee member; recommending technical solutions to commercial industrial and institutional issues.
- Assisted in the development of California Urban Water Conservation Councils Guidebook for commercial institutional, and industrial water conservation program implementation (BMP 9).
- Contra Costa Water District's liaison to the Contra Costa Green Business Program certifying businesses as Green Businesses in Contra Costa County that incorporate an exemplary level of resource management.

## Administrative Analyst, April 1990 to July 1995 Marin Municipal Water District, Corte Madera, California

• Established water conservation programs for Marin County residents in response to the drought, including low flow toilet rebate programs, commercial industrial and institutional rebate programs. Responsible for assessing water entitlements for established businesses in response to a water moratorium.

## Michael Hazinski East Bay Municipal Utility District (EBMUD)

Michael Hazinski has ten years of experience in implementing water-use-efficiency programs and is currently a Water Conservation Supervisor for the East Bay Municipal Utility District (EBMUD). Michael's responsibilities include the recruitment and training of water conservation staff, procuring consulting services and administering contracts for research and program implementation, and representing EBMUD on interagency water conservation committees. Michael also evaluates conservation programs and recently edited and managed production of the EBMUD Water Conservation Division FY00 Annual Report for national distribution. He holds a Bachelor of Arts degree from San Francisco State University and has extensive training in Landscape Architecture and Horticulture.

## Denis Poggio MARIN MUNICIPAL WATER DISTRICT (MMWD)

Denis Poggio has been the Water Conservation Coordinator of MMWD's Demand Management department for the past 1.5 years. The Demand Management department is comprised of 7 full time staff persons ranging from Staff Secretary, an Administrative Assistant, to five Water Conservation Specialists.

Mr. Poggio has managed MMWD's Washer Rebate program for the District for the past 1.5 years.

Mr. Poggio has been employed with MMWD since 1990 and began his tenure as a Water Management Inspector, and promoted to a Water Management Representative, and promoted to a Water Conservation Specialist in 1997. In 1999 Mr. Poggio was promoted to the Water Conservation Coordinator to further enhance MMWD's conservation efforts in the landscape and business community.

Prior to joining MMWD, Mr. Poggio was president of a Bay Area landscape contracting corporation specializing in commercial, industrial, and residential landscape design, installation and maintenance projects.

Mr. Poggio graduated from San Francisco City College with an Associate Science degree in Ornamental Horticulture and from Cal-Poly/Pomona with a Bachelor of Science degree in Park Administration.

## William Granger SANTA CLARA VALLEY WATER DISTRICT (SCVWD)

**Chairperson** of the California Urban Water Conservation Council's Residential Subcommittee. Developed meeting agenda, led group discussion. November 1999 to present.

**Acting Water Conservation Coordinator**, Santa Clara Valley Water District. Authorized purchases, attended and organized meetings, and oversaw the day-to-day operations of the Water Conservation Unit. July 1999 to September 1999; April to June 2000.

**Water Conservation Specialist II**, Santa Clara Valley Water District. Designed and managed the Residential Water Survey Program, the Residential and Commercial Clothes Washer Rebate Program, the Nursery Program, and the Toilet Replacement Program on behalf of the District's nine retailers. Duties include supervising surveyor staff, daily program oversight, developing brochures and Requests for Proposals, and reporting on BMPs. February 1998 to present.

**Water Management Inspector II**, Marin Municipal Water District. Coordinated the installation of Ultra-Low Flow toilets in local schools, functioned as the District's liaison for DWR's statewide residential graywater pilot study, organized landscape and commercial seminars, and conducted water surveys for single-family, multi-family, and commercial accounts. February 1996 to January 1998.

**Water Management Inspector**, Marin Municipal Water District. Managed the daily operations of the toilet rebate program, conducted water surveys for single-family, multi-family, and commercial accounts, helped organize residential landscape seminars. August 1994 to February 1996.

**Water Conservation Representative**, City of San Diego. Conducted residential interior and exterior water surveys, retrofit residences with water conserving devices, and issued water-saving recommendations. July to August 1994.

## **EDUCATION**

San Diego State University, M.A. in Geography with a concentration in natural resources and environmental quality. Thesis: "Examination of the Perceived Constraints Toward Drought Tolerant Forms of Landscaping"

University of Florida, B.A. in Geography with a minor in environmental studies.

## APPENDIX IV COST ESTIMATE

## Appendix IV

Table 1. High Efficiency Washing Machine Rebate Program Cost Estimate

Two Year Program (July 1, 2001 - June 30, 2003)

								AGENCY	CALFED	TOTAL PROJECT
	MMWD	Zone 7	ACWD	DAVIS	CCWD	EBMUD	SCVWD	TOTALS	TOTAL	COST
Overhead/rebate Cost to Agency	25	30	25	25	25	27.3	25			
Agency rebate	75	75	75	150	75	75	100			
Annual Rebates	687.5	500	700	485	1000	3800	4500	11672.5		
a. Salaries					\$6,500	\$26,972		\$33,472		
b. Benefits					\$2,500	\$10,374		\$12,874		
c. Supplies								\$0		
d. Equipment								\$0		
e. Prof. Services	\$17,188	\$15,000	\$17,500	\$12,125	\$8,750	\$36,309	\$112,500	\$219,372		
f. Travel								\$0		
g. Other					\$7,250	\$30,085		\$37,335		
Rebates	\$51,563	\$37,500	\$52,500	\$72,750	\$75,000	\$285,000	\$450,000	\$1,024,313	\$875,438	\$875,438
h. Annual Total	\$68,750	\$52,500	\$70,000	\$84,875	\$100,000	\$388,740	\$562,500	\$1,327,365		\$1,327,365
Project Total								\$2,654,730	\$1,750,875	\$4,405,605

## APPENDIX V LETTERS OF SUPPORT

# Appendix IV. City of Davis Table 2. Economic Analysis Worksheets Washing Machine Rebate Programs

Calendar Year         Rebate Offere           2001         485           2002         485           2003         2004           2005         485	(kWh/yr)  5 315,735	Annual Water Savings (AF/yr) 8 15 15 15	Amount of Rebate Received  (Cust)  109,125 109,125 0 0	Total Discounted Benefits  102,948 97,121 0	Avoided cost of water  (Cust)  10,782 21,563	Total Discounted Benefits  10,171 19,191	Avoided cost of power (Cust)	Total Discounted Benefits	Avoided cost of water (Agency)	Total Discounted Benefits	Avoided cost of WW	Total Discounted Benefits	Financial Incentives	Total Discounted Costs	Financial Incentives	Total Discounted Costs	Operating Expenses	Total Discounted Costs	Net Present Value (\$)
2001 485 2002 485 2004 2005	Savings   (kWh/yr)	Savings (AF/yr)  8 15 15 15	(Cust)  109,125 109,125 0 0	102,948 97,121 0	(Cust) 10,782 21,563	Benefits 10,171	power (Cust)	Benefits	water	Benefits	of WW								
2001 485 2002 485 2003 2004 2005	(kWh/yr)  5 315,735  5 631,470  631,470  631,470  631,470  631,470	(AF/yr)  8 15 15 15	(Cust) 109,125 109,125 0 0	102,948 97,121 0	(Cust) 10,782 21,563	10,171	(Cust)					Benefits	Incentives	Costs	Incentives	Costs	Expenses	Costs	Value (\$)
2002 485 2003 2004 2005	5 315,735 5 631,470 631,470 631,470 631,470 631,470	8 15 15 15 15	109,125 109,125 0 0	97,121 0	10,782 21,563				(Agency)										
2002 485 2003 2004 2005	5 315,735 5 631,470 631,470 631,470 631,470 631,470	8 15 15 15 15	109,125 109,125 0 0	97,121 0	10,782 21,563				(Agency)										
2002 485 2003 2004 2005	5 631,470 631,470 631,470 631,470 631,470	15 15 15 15	109,125 0 0	97,121 0	21,563		37,893				(WW Entity)		(CALFED)		(Agency)		(Agency)		
2002 485 2003 2004 2005	5 631,470 631,470 631,470 631,470 631,470	15 15 15 15	109,125 0 0	97,121 0	21,563		37,893												
2003 2004 2005	631,470 631,470 631,470 631,470	15 15 15	0	0		19 191		35,748	2,513	2,370	5,208	4,913	36,375	34,316	72,750	68,632	12,125	11,439	41,764
2004 2005	631,470 631,470 631,470	15 15	0	-			75,786	67,449	5,025	4,473	10,415	9,269	36,375	32,374	72,750	64,747	12,125	10,791	89,591
2005	631,470 631,470	15	-		21,563	18,105	75,786	63,631	5,025	4,219	10,415	8,745	0	0	0	0	0	0	94,700
	631,470			0	21,563	17,080	75,786	60,030	5,025	3,981	10,415	8,250	0	0	0	0	0	0	89,340
			0	0	21,563	16,113	75,786	56,632	5,025	3,755	10,415	7,783	0	0	0	0	0	0	84,283
2006	621 170	15	0	0	21,563	15,201	75,786	53,426	5,025	3,543	10,415	7,342	0	0	0	0	0	0	79,512
2007	631,470	15	0	0	21,563	14,341	75,786	50,402	5,025	3,342	10,415	6,927	0	0	0	0	0	0	75,012
2008	631,470	15	0	0	21,563	13,529	75,786	47,549	5,025	3,153	10,415	6,535	0	0	0	0	0	0	70,766
2009	631,470	15	0	0	21,563	12,763	75,786	44,858	5,025	2,975	10,415	6,165	0	0	0	0	0	0	66,760
2010	631,470	15	0	0	21,563	12,041	75,786	42,319	5,025	2,806	10,415	5,816	0	0	0	0	0	0	62,981
2011	631,470	15	0	0	21,563	11,359	75,786	39,923	5,025	2,647	10,415	5,487	0	0	0	0	0	0	59,416
2012	631,470	15	0	0	21,563	10,716	75,786	37,663	5,025	2,497	10,415	5,176	0	0	0	0	0	0	56,053
2013	315,735	8	0	0	10,782	5,055	37,893	17,766	2,513	1,178	5,208	2,441	0	0	0	0	0	0	26,440
Totals:	7,577,640	182	218,250	200,069	258,757	175,665	909,433	617,396	60,304	40,939	124,981	84,847	145,500	66,690	145,500	133,379	24,250	22,230	896,618
									Valu	e of conserved	water (\$/AF) =	331							
									Value o	f wastewater s	vings (\$/AF) =	686							
										Disco	ant rate (real) =	6.0%							
										Water savi	ngs (gpy/unit) =	5,100							
									Eı		kWh/yr/unit) =	651							
								Cor		er cost saving		78.13							-
										ter cost saving		22.23							-
									CALFED cost of			75							-
									Amount of rebate offered by			150							
									Agency cost to administe			25							
									. igency		come (\psi) =								

Appendix IV. Spreadsheet Summary

Agency CALFED discounted costs discounted costs

2,433,515 1,604,971

Water savings \$benefits to agency-water \$benefits to ww

4,385 1,011,790 2,026,619

Customer

\$-rebate \$-water bill \$-electricty TOTAL

3,482,888 4,227,344 14,857,507 22,567,738

KWH-electricty 182,354,865

#### Appendix IV. MMWD

## Table 2. Economic Analysis Worksheets Washing Machine Rebate Programs

								Benefit	s (\$)				Costs (\$)								
		Annual	Annual	Amount of	Total	Avoided	Total		Total	Avoided	Total		Total		Total		Total		Total	Net	
Calendar	Rebates	Electrical	Water	Rebate	Discounted	cost of	Discounted	Avoided cost	Discounted	cost of	Discounted	Avoided cost	Discounted	Financial	Discounted	Financial	Discounted	Operating	Discounted	Present	
Year	Offered	Savings	Savings	Received	Benefits	water	Benefits	of power	Benefits	water	Benefits	of WW	Benefits	Incentives	Costs	Incentives	Costs	Expenses	Costs	Value (\$)	
		(kWh/yr)	(AF/yr)	(Cust)		(Cust)		(Cust)		(Agency)		(WW Entity)		(CALFED)		(Agency)		(Agency)		<u> </u>	
2001	675	439,425	11	101,250	95,519	15,005	14,156	52,738	49,753	14,791	13,954	7,195	6,788	50,625	47,759	50,625	47,759	16,875	15,920	68,730	
2002	700	895,125	22	105,000	93,450	30,566	27,204	107,429	95,611	30,130	26,816	14,656	13,044	52,500	46,725	52,500	46,725	17,500	15,575	147,099	
2003		895,125	22	0	0	30,566	25,664	107,429	90,199	30,130	25,298	14,656	12,306	0	0	0	0	0	0	153,466	
2004		895,125	22	0	0	30,566	24,211	107,429	85,094	30,130	23,866	14,656	11,609	0	0	0	0	0	0	144,780	
2005		895,125	22	0	0	30,566	22,841	107,429	80,277	30,130	22,515	14,656	10,952	0	0	0	0	0	0	136,585	
2006		895,125	22	0	0	30,566	21,548	107,429	75,733	30,130	21,240	14,656	10,332	0	0	0	0	0	0	128,853	
2007		895,125	22	0	0	30,566	20,328	107,429	71,446	30,130	20,038	14,656	9,747	0	0	0	0	0	0	121,560	
2008		895,125	22	0	0	30,566	19,178	107,429	67,402	30,130	18,904	14,656	9,195	0	0	0	0	0	0	114,679	
2009		895,125	22	0	0	30,566	18,092	107,429	63,587	30,130	17,834	14,656	8,675	0	0	0	0	0	0	108,188	
2010		895,125	22	0	0	30,566	17,068	107,429	59,988	30,130	16,824	14,656	8,184	0	0	0	0	0	0	102,064	
2011		895,125	22	0	0	30,566	16,102	107,429	56,592	30,130	15,872	14,656	7,721	0	0	0	0	0	0	96,287	
2012		895,125	22	0	0	30,566	15,190	107,429	53,389	30,130	14,974	14,656	7,284	0	0	0	0	0	0	90,837	
2013		439,425	11	0	0	15,005	7,035	52,738	24,726	14,791	6,935	7,461	3,498	0	0	0	0	0	0	42,193	
Totals:		10,725,225	258	206,250	188,968	366,239	248,618	1,287,192	873,796	361,011	245,068	175,873	119,333	103,125	94,484	103,125	94,484	34,375	31,495	1,455,321	
										Value of	of conserved	vater (\$/AF) =	1,400								
										Value of v	vastewater sa	vings (\$/AF) =	681								
										Discount rate		nt rate (real) =	6.0%								
											Water saving	gs (gpy/unit) =	5,100								
										Ener	gy Savings (l	(Wh/yr/unit) =	651								
									Consumer power cos		cost savings	(\$/yr/rebate) =	78.13								
									Consumer water cost savin			(\$/yr/rebate) =	22.23								
									CALFED cost of re			of rebate (\$) =	75								
									Ame	ount of reb	ate offered by	agency (\$) =	75								
									A	Agency cos	t to administ	er rebate (\$) =	25								

#### Appendix IV.

#### ACWD

#### Table 2. Economic Analysis Worksheets

#### Washing Machine Rebate Programs

												wasning	ng Machine Rebate Programs							
								Benefi	ts (\$)				Costs (\$)							
		Annual	Annual	Amount of	Total	Avoided	Total	Avoided	Total	Avoided	Total		Total		Total		Total		Total	Net
Calendar	Rebates	Electrical	Water	Rebate	Discounted	cost of	Discounted	cost of	Discounted	cost of	Discounted	Avoided cost	Discounted	Financial	Discounted	Financial	Discounted	Operating	Discounted	Present
Year	Offered	Savings	Savings	Received	Benefits	water	Benefits	power	Benefits	water	Benefits	of WW	Benefits	Incentives	Costs	Incentives	Costs	Expenses	Costs	Value (\$)
		(kWh/yr)	(AF/yr)	(Cust)		(Cust)		(Cust)		(Agency)		(WW Entity)		(CALFED)		(Agency)		(Agency)		1
2001	700	455,700	11	105,000	99,057	15,561	14,680	54,691	51,595	4,930	4,651	7,396	6,977	52,500	49,528	52,500	49,528	17,500	16,509	61,394
2002	700	911,400	22	105,000	93,450	31,122	27,698	109,382	97,350	9,861	8,776	14,791	13,164	52,500	46,725	52,500	46,725	17,500	15,575	131,413
2003		911,400	22	0	0	31,122	26,131	109,382	91,839	9,861	8,279	14,791	12,419	0	0	0	0	0	0	138,668
2004		911,400	22	0	0	31,122	24,652	109,382	86,641	9,861	7,811	14,791	11,716	0	0	0	0	0	0	130,819
2005		911,400	22	0	0	31,122	23,256	109,382	81,737	9,861	7,368	14,791	11,053	0	0	0	0	0	0	123,414
2006		911,400	22	0	0	31,122	21,940	109,382	77,110	9,861	6,951	14,791	10,427	0	0	0	0	0	0	116,428
2007		911,400	22	0	0	31,122	20,698	109,382	72,745	9,861	6,558	14,791	9,837	0	0	0	0	0	0	109,838
2008		911,400	22	0	0	31,122	19,526	109,382	68,628	9,861	6,187	14,791	9,280	0	0	0	0	0	0	103,621
2009		911,400	22	0	0	31,122	18,421	109,382	64,743	9,861	5,837	14,791	8,755	0	0	0	0	0	0	97,755
2010		911,400	22	0	0	31,122	17,378	109,382	61,078	9,861	5,506	14,791	8,259	0	0	0	0	0	0	92,222
2011		911,400	22	0	0	31,122	16,395	109,382	57,621	9,861	5,194	14,791	7,792	0	0	0	0	0	0	87,002
2012		911,400	22	0	0	31,122	15,467	109,382	54,360	9,861	4,900	14,791	7,351	0	0	0	0	0	0	82,077
2013		455,700	11	0	0	15,561	7,296	54,691	25,641	4,930	2,312	7,396	3,467	0	0	0	0	0	0	38,716
Totals:		10,936,800	263	210,000	192,506	373,464	253,537	1,312,584	891,088	118,328	80,331	177,493	120,496	105,000	96,253	105,000	96,253	35,000	32,084	1,313,368
										Value o	of conserved	vater (\$/AF) =	450							
										Value of v	vastewater sa	vings (\$/AF) =	675							
											Discou	nt rate (real) =	6.0%							
											Water saving	gs (gpy/unit) =	5,100							
										Ener	gy Savings (l	(Wh/yr/unit) =	651							
									Consu	Consumer power cost savings		(\$/yr/rebate) =	78.13							
									Consumer water cost savings (\$		(\$/yr/rebate) =	22.23								
										С	ALFED cost	of rebate (\$) =	75							
									Am	ount of reb	ate offered by	agency (\$) =	75							
										Agency cos	t to administ	er rebate (\$) =	25							

#### Appendix IV. EBMUD

#### Table 2. Economic Analysis Worksheets

#### Washing Machine Rehate Programs

Vear Offered   Savings   Savings   Received   Benefits   water   Benefits   power   Benefits   water   Benefits   water   Benefits   of WW   Benefits   Incentives   Costs   Incentives   Costs   Incentives   Costs   Vear   Captor   Capt													Machine Rebate Programs									
Calcular   Rehate   Calcular   Water   Rehate   Office   Office									Benefi	ts (\$)					Costs (\$)							
Very Office   Saving   Saving   Received   Benefits   water			Annual	Annual	Amount of	Total	Avoided	Total	Avoided	Total Avoided Total				Total		Total		Total		Total	Net	
1.   1.   1.   1.   1.   1.   1.   1.	Calendar	Rebates	Electrical	Water	Rebate	Discounted	cost of	Discounted	cost of	Discounted	Discounted cost of Discou		Avoided cost	Discounted	Financial	Discounted	Financial	Discounted	Operating	Discounted	Present	
2001 3800 2,473,800 59 570,000 597,736 84,474 79,692 266,894 280,089 7,137 6,733 40,504 38,211 285,000 268,868 285,000 253,649 103,740 97,868 2002 3800 4,947,600 119 0 0 168,948 150,363 593,788 528,469 14,275 12,704 81,008 68,016 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Year	Offered	Savings	Savings	Received	Benefits	water	Benefits	power	Benefits	water	Benefits	of WW	Benefits	Incentives	Costs	Incentives	Costs	Expenses	Costs	Value (\$)	
2001 3800 2,473,800 59 570,000 597,736 84,474 79,692 266,894 280,089 7,137 6,733 40,504 38,211 285,000 268,868 285,000 253,649 103,740 97,868 2002 3800 4,947,600 119 0 0 168,948 150,363 593,788 528,469 14,275 12,704 81,008 68,016 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0																						
2002 3800 4,947,600 119 570,000 507,298 168,948 150,363 593,788 528,469 14,275 12,704 81,008 72,097 285,000 253,649 285,000 253,649 103,740 92,328 ( 2003 4,947,600 119 0 0 168,948 134,823 593,788 498,556 14,275 11,985 81,008 68,166 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			(kWh/yr)	(AF/yr)	(Cust)		(Cust)		(Cust)		(Agency)		(WW Entity)		(CALFED)		(Agency)		(Agency)		l '	
2002 3800 4,947,600 119 570,000 507,298 168,948 150,363 593,788 528,469 14,275 12,704 81,008 72,097 285,000 253,649 285,000 253,649 103,740 92,328 ( 2003 4,947,600 119 0 0 168,948 134,823 593,788 498,556 14,275 11,985 81,008 68,166 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0																						
2003	2001	3800	2,473,800	59	570,000	537,736	84,474	79,692	296,894	280,089	7,137	6,733	40,504	38,211	285,000	268,868	285,000	268,868	103,740	97,868	306,858	
2004	2002	3800	4,947,600	119	570,000	507,298	168,948	150,363	593,788	528,469	14,275	12,704	81,008	72,097	285,000	253,649	285,000	253,649	103,740	92,328	671,305	
2005	2003		4,947,600	119	0	0	168,948	141,852	593,788	498,556	14,275	11,985	81,008	68,016	0	0	0	0	0	0	720,409	
2006	2004		4,947,600	119	0	0	168,948	133,823	593,788	470,336	14,275	11,307	81,008	64,166	0	0	0	0	0	0	679,631	
2007	2005		4,947,600	119	0	0	168,948	126,248	593,788	443,713	14,275	10,667	81,008	60,534	0	0	0	0	0	0	641,161	
2008	2006		4,947,600	119	0	0	168,948	119,102	593,788	418,597	14,275	10,063	81,008	57,107	0	0	0	0	0	0	604,869	
2009	2007		4,947,600	119	0	0	168,948	112,360	593,788	394,903	14,275	9,493	81,008	53,875	0	0	0	0	0	0	570,631	
2010	2008		4,947,600	119	0	0	168,948	106,000	593,788	372,550	14,275	8,956	81,008	50,825	0	0	0	0	0	0	538,331	
2011	2009		4,947,600	119	0	0	168,948	100,000	593,788	351,462	14,275	8,449	81,008	47,948	0	0	0	0	0	0	507,860	
2012	2010		4,947,600	119	0	0	168,948	94,340	593,788	331,568	14,275	7,971	81,008	45,234	0	0	0	0	0	0	479,113	
2013   2,473,800   59   0   0   84,474   39,605   296,894   139,195   7,137   3,346   40,504   18,990   0   0   0   0   0   0   0   0   0	2011		4,947,600	119	0	0	168,948	89,000	593,788	312,800	14,275	7,520	81,008	42,674	0	0	0	0	0	0	451,993	
Totak: 59,371,200 1,427 1,140,000 1,045,034 2,027,376 1,376,346 7,125,456 4,837,333 171,294 116,288 972,096 659,937 570,000 522,517 570,000 522,517 207,480 190,196 6  Value of conserved water (\$\sigma k\$) = Value of conserved water (\$\sigma k\$) = Value of wastewater savings (\$\sigma k\$) = 0	2012		4,947,600	119	0	0	168,948	83,962	593,788	295,094	14,275	7,094	81,008	40,258	0	0	0	0	0	0	426,409	
Value of conserved water (s/AF) =   120     681	2013		2,473,800	59	0	0	84,474	39,605	296,894	139,195	7,137	3,346	40,504	18,990	0	0	0	0	0	0	201,136	
Value of conserved water (s/AF) =   120     681																						
Value of wastewater savings (S/AF) =   681     6.0%	Totals:		59,371,200	1,427	1,140,000	1,045,034	2,027,376	1,376,346	7,125,456	4,837,333	3 171,294 116,288 97		972,096	659,937	570,000	522,517	570,000	522,517	207,480	190,196	6,799,708	
Value of wastewater savings (S/AF) =   681     6.0%											1											
Discount rate (real) = 6.0%											Value of conserved water (\$/AF)			120								
Water savings (gpy/unit) = 5,100   651   651   651   78,13   651   78,13   651   78,13   651   78,13   651   78,13   651   78,13   651   78,13   651   78,13   651   78,13   651   78,13   651   78,13   651   78,13   651   78,13   651   78,13   651   78,13   651   78,13   651   78,13   651   78,13   651   78,13   651   78,13   651   78,13   651   78,13   651   78,13   651   78,13   651   78,13   651   78,13   651   78,13   651   78,13   651   78,13   651   78,13   651   78,13   651   78,13   651   78,13   651   78,13   651   78,13   651   78,13   651   78,13   651   78,13   651   78,13   651   78,13   651   78,13   651   78,13   78,13   651   78,13   651   78,13   651   78,13   651   78,13   78,13   651   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,13   78,											Value of wastewater savin			681								
Energy Savings (kWh/yr/unit) =   651     78.13												Discou	nt rate (real) =	6.0%								
Consumer power cost savings (\$/yr/rebate) = 78.13   Consumer water cost savings (\$/yr/rebate) = 22.23												Water saving	gs (gpy/unit) =	5,100								
Consumer water cost savings (S/yr/rebate) = 22.23											Ener	gy Savings (	(Wh/yr/unit) =	651								
										Consu	mer power	cost savings	(\$/yr/rebate) =	78.13								
CALFED cost of rebate (\$) = 75										Const	ımer water	cost savings	(\$/yr/rebate) =	22.23								
											С	ALFED cost	of rebate (\$) =	75			Ì					
Amount of rebate offered by agency (\$) = 75										Am				75								
Agency cost to administer rebate (\$) = 27.30											Agency cos	t to administ	er rebate (\$) =	27.30								

#### Appendix IV

#### Zone 7

### Table 2. Economic Analysis Worksheets

#### Washing Machine Rebate Programs

								Benefi	ts (\$)			Costs (\$)								
		Annual	Annual	Amount of	Total	Avoided	Total	Avoided	Total	Avoided	Total		Total		Total		Total		Total	Net
Calendar	Rebates	Electrical	Water	Rebate	Discounted	cost of	Discounted	cost of	Discounted	iscounted cost of Discounted			Discounted	Financial	Discounted	Financial	Discounted	Operating	Discounted	Present
Year	Offered	Savings	Savings	Received	Benefits	water	Benefits	power	Benefits	water	Benefits	of WW	Benefits	Incentives	Costs	Incentives	Costs	Expenses	Costs	Value (\$)
		(kWh/yr)	(AF/yr)	(Cust)		(Cust)		(Cust)		(Agency)		(WW Entity)		(CALFED)		(Agency)		(Agency)		ı
2001	500	325,500	8	75,000	70,755	11,115	10,486	39,065	36,854	4,304	4,061	5,329	5,028	37,500	35,377	37,500	35,377	15,000	14,151	42,277
2002	500	651,000	16	75,000	66,750	22,230	19,785	78,130	69,535	8,609	7,662	10,659	9,486	37,500	33,375	37,500	33,375	15,000	13,350	93,118
2003		651,000	16	0	0	22,230	18,665	78,130	65,599	8,609	7,228	10,659	8,949	0	0	0	0	0	0	100,442
2004		651,000	16	0	0	22,230	17,608	78,130	61,886	8,609	6,819	10,659	8,443	0	0	0	0	0	0	94,756
2005		651,000	16	0	0	22,230	16,612	78,130	58,383	8,609	6,433	10,659	7,965	0	0	0	0	0	0	89,393
2006		651,000	16	0	0	22,230	15,671	78,130	55,079	8,609	6,069	10,659	7,514	0	0	0	0	0	0	84,333
2007		651,000	16	0	0	22,230	14,784	78,130	51,961	8,609	5,725	10,659	7,089	0	0	0	0	0	0	79,559
2008		651,000	16	0	0	22,230	13,947	78,130	49,020	8,609	5,401	10,659	6,688	0	0	0	0	0	0	75,056
2009		651,000	16	0	0	22,230	13,158	78,130	46,245	8,609	5,095	10,659	6,309	0	0	0	0	0	0	70,807
2010		651,000	16	0	0	22,230	12,413	78,130	43,627	8,609	4,807	10,659	5,952	0	0	0	0	0	0	66,799
2011		651,000	16	0	0	22,230	11,710	78,130	41,158	8,609	4,535	10,659	5,615	0	0	0	0	0	0	63,018
2012		651,000	16	0	0	22,230	11,048	78,130	38,828	8,609	4,278	10,659	5,297	0	0	0	0	0	0	59,451
2013		325,500	8	0	0	11,115	5,211	39,065	18,315	4,304	2,018	5,329	2,499	0	0	0	0	0	0	28,043
Totals:		7,812,000	188	150,000	137,504	266,760	181,098	937,560	636,491	1 103,303 70,130		127,907	86,834	75,000	68,752	75,000	68,752	30,000	27,501	947,052
										Value of conserved water (\$/AF) =			550							
										Value of wastewater saving			681							
												nt rate (real) =	6.0%							
									Water saving				5,100							
									Energy Savings (I				651							
												(\$/yr/rebate) =	78.13							
									Consu			(\$/yr/rebate) =	22.23							
												of rebate (\$) =	75							
												y agency (\$) =	75							
									1	Agency cos	t to administ	er rebate (\$) =	30							

#### Appendix IV CCWD

#### Table 2. Economic Analysis Worksheets

#### Washing Machine Rehate Programs

												Machine Rebate Programs									
								Benefi	ts (\$)					Costs (\$)							
		Annual	Annual	Amount of	Total	Avoided	Total	Avoided	Total Avoided Total				Total		Total		Total		Total	Net	
Calendar	Rebates	Electrical	Water	Rebate	Discounted	cost of	Discounted	cost of	Discounted	Discounted cost of Discou		Avoided cost	Discounted	Financial	Discounted	Financial	Discounted	Operating	Discounted	Present	
Year	Offered	Savings	Savings	Received	Benefits	water	Benefits	power	Benefits	water	Benefits	of WW	Benefits	Incentives	Costs	Incentives	Costs	Expenses	Costs	Value (\$)	
		(kWh/yr)	(AF/yr)	(Cust)		(Cust)		(Cust)		(Agency)		(WW Entity)		(CALFED)		(Agency)		(Agency)		1	
2001	1000	651,000	16	150,000	141,509	22,230	20,972	78,130	73,708	3,522	3,322	10,659	10,056	75,000	70,755	75,000	70,755	25,000	23,585	84,472	
2002	1000	1,302,000	31	150,000	133,499	44,460	39,569	156,260	139,071	7,043	6,269	21,318	18,973	75,000	66,750	75,000	66,750	25,000	22,250	181,632	
2003		1,302,000	31	0	0	44,460	37,329	156,260	131,199	7,043	5,914	21,318	17,899	0	0	0	0	0	0	192,341	
2004		1,302,000	31	0	0	44,460	35,216	156,260	123,773	7,043	5,579	21,318	16,886	0	0	0	0	0	0	181,454	
2005		1,302,000	31	0	0	44,460	33,223	156,260	116,767	7,043	5,263	21,318	15,930	0	0	0	0	0	0	171,183	
2006		1,302,000	31	0	0	44,460	31,343	156,260	110,157	7,043	4,965	21,318	15,028	0	0	0	0	0	0	161,493	
2007		1,302,000	31	0	0	44,460	29,568	156,260	103,922	7,043	4,684	21,318	14,178	0	0	0	0	0	0	152,352	
2008		1,302,000	31	0	0	44,460	27,895	156,260	98,039	7,043	4,419	21,318	13,375	0	0	0	0	0	0	143,728	
2009		1,302,000	31	0	0	44,460	26,316	156,260	92,490	7,043	4,169	21,318	12,618	0	0	0	0	0	0	135,593	
2010		1,302,000	31	0	0	44,460	24,826	156,260	87,255	7,043	3,933	21,318	11,904	0	0	0	0	0	0	127,918	
2011		1,302,000	31	0	0	44,460	23,421	156,260	82,316	7,043	3,710	21,318	11,230	0	0	0	0	0	0	120,677	
2012		1,302,000	31	0	0	44,460	22,095	156,260	77,656	7,043	3,500	21,318	10,594	0	0	0	0	0	0	113,846	
2013		651,000	16	0	0	22,230	10,422	78,130	36,630	3,522	1,651	10,659	4,997	0	0	0	0	0	0	53,701	
Totals:		15,624,000	376	300,000	275,009	533,520	362,196	1,875,120	1,272,982	2 84,520 57,379 25		255,815	173,668	150,000	137,504	150,000	137,504	50,000	45,835	1,820,390	
										Value of conserved water (\$/AF) =			225								
										Value of wastewater saving			681								
											Discou	nt rate (real) =	6.0%								
											Water saving	gs (gpy/unit) =	5,100								
										Ener	gy Savings (	(Wh/yr/unit) =	651								
									Consu	mer power	cost savings	(\$/yr/rebate) =	78.13								
									Consu	ımer water	cost savings	(\$/yr/rebate) =	22.23								
										C	ALFED cost	of rebate (\$) =	75								
									Am	ount of reb	ate offered by	y agency (\$) =	75								
										Agency cos	t to administ	er rebate (\$) =	25								